

CLAIMS (clean claims)

1. Recognition unit (2) for recognizing synchronization signals in at least one audiovisual programme (15) received, said audiovisual programme (15) comprising an audiovisual content intended to be broadcast to users and control information, said recognition unit (2) comprising :

- a reception module (21, 24) and a recording module (25), for receiving and recording in a storage space (20), recognition elements (11) making it possible to obtain at least one extracted portion of the content of said audiovisual programme (15),

- a reception module (21) for receiving at least one transmitted stream carrying said audiovisual programme (15),

- a detection module (22) for detecting said synchronization signals (11) in said audiovisual programme (15) received, by means of said recognition elements (11) stored in said storage space (20), by recognition in the content of said audiovisual programme (15) received, of said extracted portion,

- and a transmission module (23) for transmitting action instructions (12) in case of detection of said synchronization signals in said audiovisual programme (15), said instructions (12) being designed so as to trigger at least one action,

characterized in that the recognition unit (2) also comprises a module (26) for timeout before dispatch of said action instructions (12) by the transmission module (23) when said synchronization signals are detected in said audiovisual programme (15).

2. Recognition unit (2) according to Claim 1, characterized in that said reception (24) and recording (25) modules for receiving and recording said recognition elements (11) are designed so as respectively to receive and record also at least one timeout lag (13) and in that the timeout module (26) is designed to use said lag (13).

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3. Recognition unit (2) according to one of Claims 1 or 2, characterized in that the modules (24) and (25) for receiving and recording recognition elements (11) and the module (23) for transmitting action 5 instructions (12) are designed so as respectively to receive, record and transmit identifiers (12) relating to said actions to be triggered.

4. Recognition unit (2) according to any one of the preceding claims, characterized in that each of said portions of content consists of at 10 least one of the following portions : an image, an image part, a sound and any combination of at least two of said portions.

5. Recognition unit (2) according to any one of the preceding claims, characterized in that said recognition elements (11) include at least 15 one boolean operator, said detection module (22) being designed to detect at least two of said portions of content in conjunction with said boolean operator and the transmission module (23) being designed to transmit said action instructions (12) in case of such detection.

20 6. Recognition unit (2) according to any one of the preceding claims, characterized in that said recognition elements (11) include at least one time information item, said detection module (22) being designed to detect said portions of content in conjunction with said time information item and the transmission module (23) being designed to transmit said action 25 instructions (12) in case of such detection.

7. Recognition unit (2) according to Claim 6, characterized in that said time information item comprises at least one information item chosen from among a date of detection and a detection time slot.

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8. Recognition unit (2) according to any one of the preceding claims, characterized in that said recognition elements (11) include at least

one channel reference, said detection module (22) being designed to detect said portions of content in conjunction with said channel reference and the transmission module (23) being designed to transmit said action instructions (12) in the case of such detection.

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9. Recognition unit (2) according to any one of the preceding claims, characterized in that the reception module (24) for receiving the recognition elements (11) is designed to directly receive said extracted portion from among said recognition elements (11) and the recording module 10 (25) is designed to record said extracted portion in the storage space (20).

10. Recognition unit (2) according to any one of the preceding claims, characterized in that the reception module (21, 24) for receiving the recognition elements (11) is designed to receive from among said recognition 15 elements (11), instructions for extracting said extracted portion in at least one stream of an audiovisual programme previously received by the stream reception module (21), and in that said recording module (25) is designed to extract directly said portion of said stream according to said extraction instructions and to record said portion in the storage space (20).

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11. Recognition unit (2) according to any one of the preceding claims, characterized in that the reception module (24) for receiving the recognition elements (11) is designed to receive from among said recognition elements (11), at least one identifier of said extracted portion, and in that said 25 detection module (22) is capable of retrieving from the storage space (20) said extracted portion previously recorded and associated with said identifier, so as to recognize in the content of said audiovisual programme (15) received said extracted portion.

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12. Specification unit (1) for specifying synchronization signals associated with at least one audiovisual programme (15), said audiovisual programme (15) comprising an audiovisual content intended to be broadcast

to users and control information, and said synchronization signals being intended to be detected in at least one transmitted stream carrying said audiovisual programme (15) and thus to trigger at least one action.

characterized in that said specification unit (1) comprises:

- a preparation module (34) for preparing recognition elements (11) making it possible to obtain at least one extracted portion of the content of said audiovisual programme (15),
 - and a transmission module (37) for transmitting said recognition elements (11) independently of transmissions of said audiovisual programme (15), to at least one recognition unit (2) intended to detect said synchronization signals in said transmitted stream carrying said audiovisual programme (15), by recognizing said extracted portion in the content of said audiovisual programme (15),

15 and in that the preparation (34) and transmission (37) modules of
said unit (1) are designed respectively to prepare and transmit at least one
action timeout lag (13, 19) in case of detection of said synchronization
signals,

20 said specification unit (1) preferably being capable of cooperating
with said recognition unit (2) in accordance with any one of Claims 1 to 11.

13. Specification unit (1) according to Claim 12, characterized in
that the preparation (34) and transmission (37) modules of said unit (1) are
designed respectively to prepare and transmit identifiers (12) relating to said
actions to be triggered in case of detection of said synchronization signals.

14. Specification unit (1) according to Claim 13, characterized in
that said action identifiers (12) relate to at least one of the following actions :
30 broadcasting of an interactive service (S), triggering of an interactive service
(S), triggering of an update of an interactive service (S), triggering of a
recording of said audiovisual programme (15) and connection to a website.

15. Assembly for activation by recognition of synchronization signals in at least one audiovisual programme (15) received, said audiovisual programme (15) comprising an audiovisual content intended to be broadcast
5 to users and control information, the activation assembly comprising :

- a recognition unit (2) for recognizing said synchronization signals in at least one transmitted stream carrying said audiovisual programme (15), by recognition of at least one extracted portion of the content of said audiovisual programme (15), by means of recognition elements (11) making it possible to obtain said portion and recorded in a storage space (20),

10 - and an activation unit (3) designed to trigger at least one action in case of detection of said synchronization signals (11) by the recognition unit (2),

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characterized in that at least one of said recognition (2) and activation (3) units is designed to delay the triggering of said action by at least a determined timeout lag (13, 19), in case of detection of said synchronization signals,

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said recognition unit (2) preferably being in accordance with any one of Claims 1 to 11.

16. Activation assembly according to Claim 15, characterized in
25 that said activation assembly is designed to receive said timeout lag (13, 19) with said recognition elements (11).

17. Synchronization system (5) comprising :

- a specification unit (1) for specifying synchronization signals
30 associated with at least one audiovisual programme (15), said audiovisual programme (15) comprising an audiovisual content intended to be broadcast to users and control information,

- a recognition unit (2) for recognizing said synchronization signals in at least one transmitted stream carrying said audiovisual programme (15), by recognition of at least one extracted portion of the content of said audiovisual programme (15), in the audiovisual programme received ,
 - and an activation unit (3) designed to trigger at least one action in case of detection of said synchronization signals by the recognition unit (2), the recognition unit (2) and the activation unit (3) forming an activation assembly,

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characterized in that the specification unit (1) is designed to prepare and transmit to the recognition unit (2) recognition elements (11) making it possible to obtain said extracted portion, as well as at least one action timeout lag (13, 19) in case of detection of said synchronization signals, and in that the activation assembly is capable of delaying the triggering of said action according to said lag (13, 19) transmitted, in case of detection of said synchronization signals,

the specification unit (1) preferably being in accordance with any one of Claims 12 to 14 and the activation assembly preferably being in accordance with one of Claims 15 or 16.

18. Broadcasting centre (50), characterized in that it comprises a device chosen from among at least a specification module (1) in accordance with any one of Claims 12 to 14, a recognition module (2) in accordance with any one of Claims 1 to 11, an activation assembly in accordance with one of Claims 15 or 16, and a synchronization system (5) in accordance with Claim 17.

19. Services operator (60), characterized in that it comprises a device chosen from among at least a specification module (1) in accordance with any one of Claims 12 to 14, a recognition module (2) in accordance with any one of Claims 1 to 11, an activation assembly in accordance with one of

Claims 15 or 16, and a synchronization system (5) in accordance with Claim 17.

20. Terminal (70) for receiving audiovisual programmes (15),
5 characterized in that it comprises a device chosen from among at least a specification module (1) in accordance with any one of Claims 12 to 14, a recognition module (2) in accordance with any one of Claims 1 to 11, an activation assembly in accordance with one of Claims 15 or 16, and a synchronization system (5) in accordance with Claim 17.

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21. Method of activation by recognition of synchronization signals in at least one audiovisual programme (15) received, said audiovisual programme (15) comprising an audiovisual content intended to be broadcast to users and control information, said method comprising the following steps :

15 - reception of at least one transmitted stream carrying said audiovisual programme (15),

- detection of said synchronization signals (11) in said audiovisual programme (15) received by means of recognition elements (11) making it possible to obtain at least one extracted portion of the content of
20 said audiovisual programme (15) and stored in a storage space (20), by recognition of said extracted portion, in the content of said audiovisual programme (15),

- and triggering of at least one action in case of detection of said synchronization signals in said audiovisual programme (15),

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characterized in that the triggering of said action is delayed by at least one determined lag (13, 19) in case of detection of said synchronization signals,

30 said recognition method preferably being implemented by means of an activation assembly in accordance with one of Claims 15 or 16.

22. Method of specifying synchronization signals associated with at least one audiovisual programme (15), said audiovisual programme (15) comprising an audiovisual content intended to be broadcast to users and control information, said synchronization signals being intended to be detected in at least one transmitted stream carrying said audiovisual programme (15) and thus to trigger at least one action,

characterized in that said method of specification comprises the following steps :

- 10 - preparation of recognition elements (11) making it possible to obtain at least one extracted portion of the content of said audiovisual programme (15),
- transmission of said information independently of transmissions of said audiovisual programme (15), for detection of said synchronization signals in said transmitted stream carrying said audiovisual programme (15), by recognition of said extracted portion in the content of said audiovisual programme (15),
- and transmission of at least one action timeout lag (13, 19) in case of detection of said synchronization signals independently of
20 transmissions of said audiovisual programme (15),

said specification method preferably being implemented by means of a specification unit (1) in accordance with any one of Claims 12 to 14.

- 25 23. Synchronization method comprising the following steps :
- a step of specifying synchronization signals associated with at least one audiovisual programme (15), said audiovisual programme (15) comprising an audiovisual content intended to be broadcast to users and control information, in which recognition elements (11) making it possible to obtain at least one extracted portion of the content of said audiovisual programme (15) are specified for said detection,

- a step of detecting said synchronization signals in at least one transmitted stream carrying said audiovisual programme (15), in which said synchronization signals are detected in said audiovisual programme received, by recognition of said extracted portion in the content of said 5 audiovisual programme (15),
 - and a step of triggering at least one action in case of detection of said synchronization signals,

characterized in that the triggering of said action is delayed by at 10 least one determined lag (13, 19) in case of detection of said synchronization signals,

said synchronization method preferably being implemented by the synchronization system (5) of Claim 17.

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24. Method according to any one of Claims 21 to 23, characterized in that said audiovisual programmes (15) comprise at least one recognition part containing at least one of said recognition portions, and at least one live transmission intended to be broadcast following said 20 recognition part, in such a way that said synchronization signals are detected during the broadcast of said recognition part and that said action is triggered during the broadcast of said following live transmission, by means of said timeout lag (13, 19).

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25. Computer programme product, characterized in that it comprises programme code instructions for executing the steps of one of the methods according to any one of Claims 21 to 24 when said programme is executed on a computer.